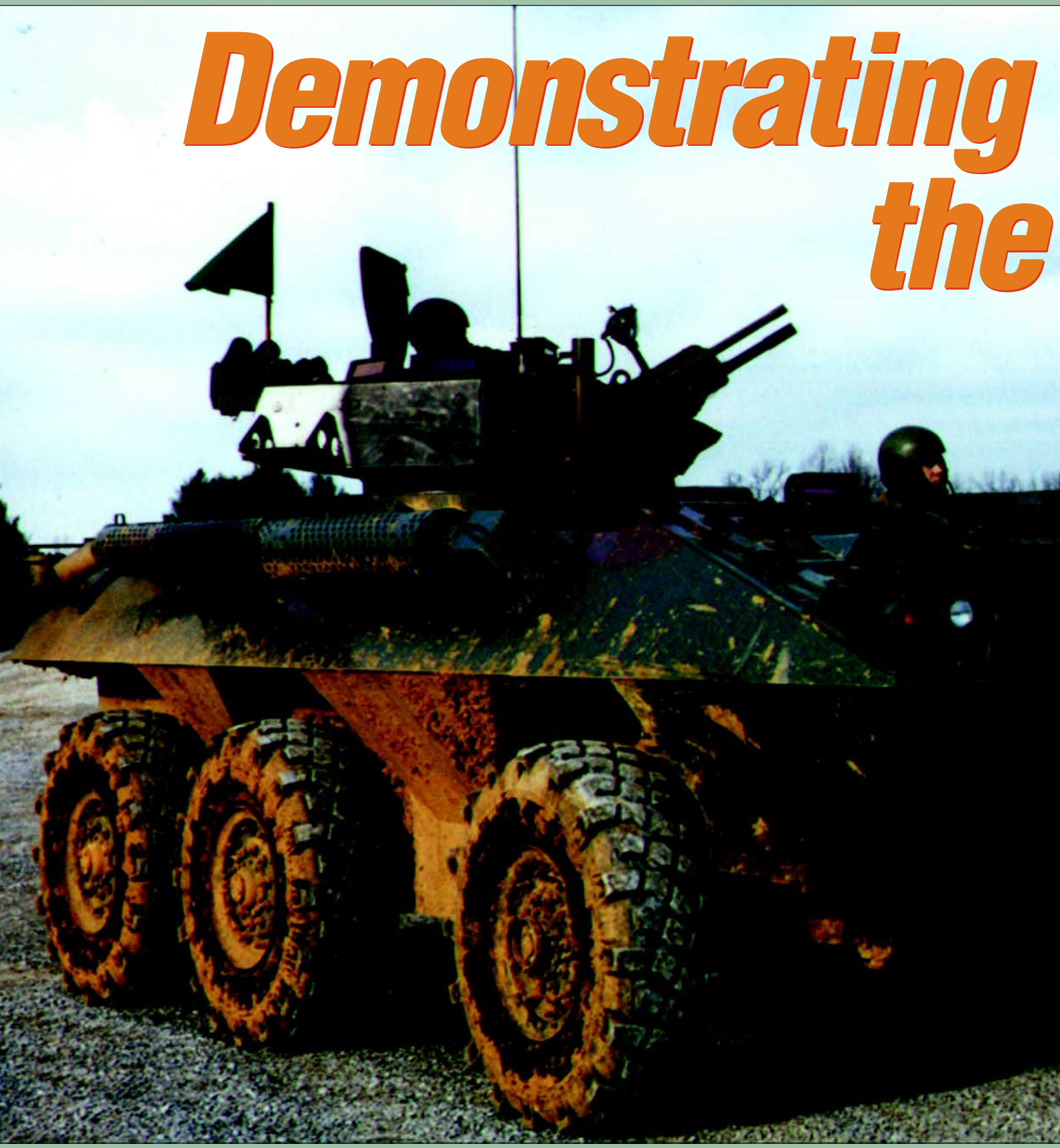
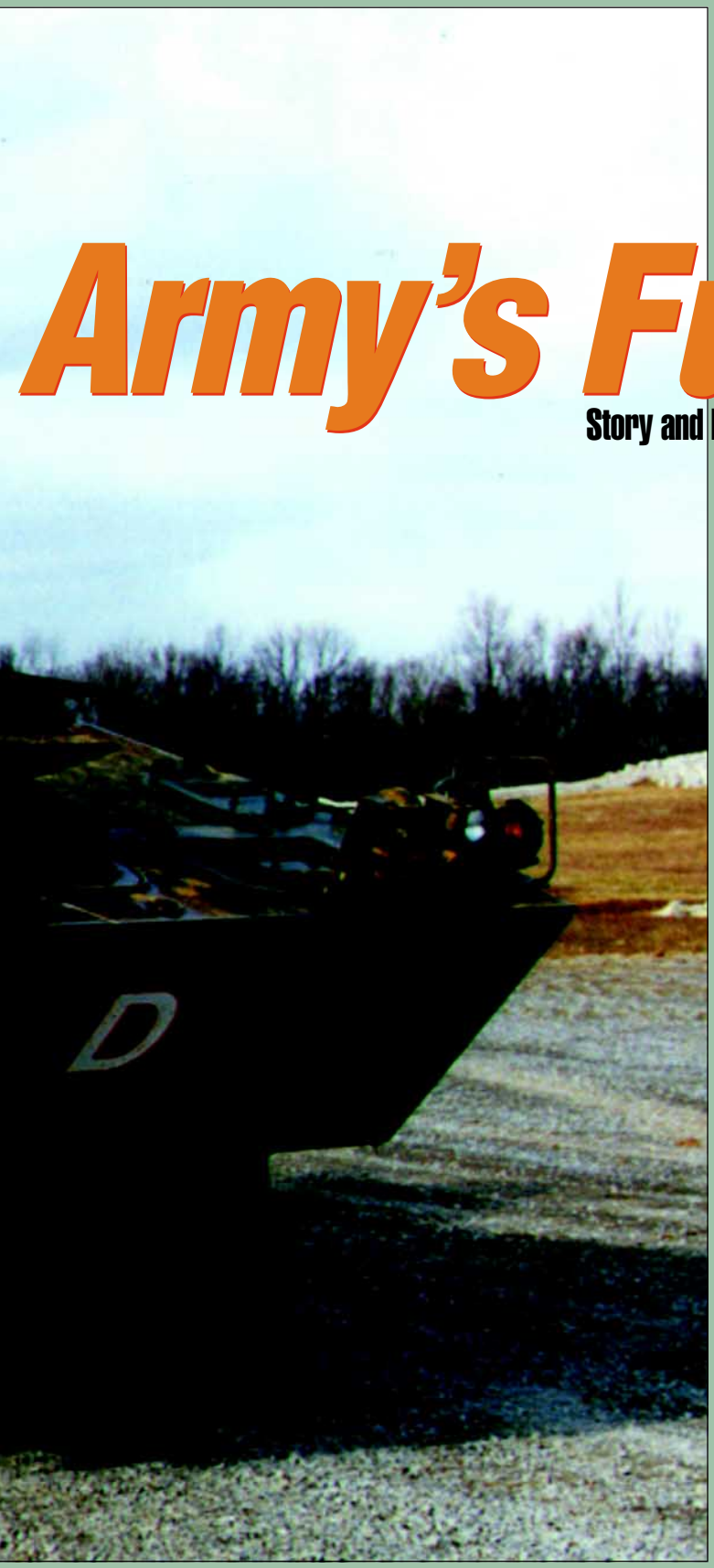
# Demonstrating the



# Army's Future

**Story and Photos by SSG John Valceanu**



CHOOSING the right interim vehicle for the Army's new brigade combat team is not an easy process, but soldiers, Department of the Army civilians and defense contractors came together at Fort Knox, Ky., in December and January to help Army leaders better understand the capabilities of currently available combat vehicles. As a result, they are helping make the Army vision a reality.

Soldiers worked closely with defense contractors, spending weeks in the field while putting various vehicles through a platform performance demonstration. The PPD gave 11 contractors from six countries the chance to demonstrate the capabilities of 35 vehicles. It also gave the Army a chance to let industry representatives know what characteristics it is looking for in its new interim armored vehicles.

**A LAV-300 Mk II infantry fighting vehicle prepares to move into position for a live-fire demonstration on St. Vith range at Fort Knox, Ky. The LAV-300 was one of 35 vehicles that participated in the platform performance demonstration held at Fort Knox in January.**

**A Pandur infantry fighting vehicle negotiates a rubble obstacle composed of concrete and steel rods. The obstacle was located on Fort Knox's MOUT site, and was intended to simulate a demolished building. The Pandur is built by General Dynamics Land Systems.**

"TO make the initial brigade combat teams a reality as quickly as possible, we had to look at off-the-shelf technology," said LTC Kevin Bergner, director of wargaming at U.S. Army Training and Doctrine Command at Fort Monroe, Va. "This PPD gives us a chance to see what industry has to offer. It allows us to develop an understanding of existing vehicles and their capabilities. It is very important that soldiers, who are the real experts, have a chance to operate these vehicles. They're the ones with unique tactical savvy that comes from living and working in them every day."

The soldiers Bergner mentioned were from the 2nd and 25th Infantry divisions at Fort Lewis, Wash. The 3rd Brigade of the 2nd Inf. Div. and the 1st Bde. of the 25th Inf. Div. are to become the Army's initial interim brigade combat teams. The soldiers went to Fort Knox for the PPD and worked closely with cavalry scouts from the 1st Battalion, 16th Cavalry Regiment.

"We've been looking forward to something like this, and we're excited to be part of the demonstration," said SSG Stephen Soucy of D Troop, 1st Bn., 16th Cav. "As a scout, I think this is a great idea. We actually had a vehicle roll up on us yesterday and we didn't hear it coming. Scouts listen for things like that."

THE PPD was conducted in several phases. The first phase lasted from early November until mid-December. This was essentially a planning and preparation stage, during which soldiers were familiarized with the vehicles, and safety measures for the PPD were instituted. Continuous operations involving road marches of approximately 50 miles a day also began during this period.

The next phase examined the platforms' deployability. Vehicles were loaded onto C-130s, heavy-equipment transports and trains.

"The need for high mobility is critical to the Army vision. We need a platform that we can deploy quickly," Bergner said. "We looked at how it fits inside a C-130, for example. We also looked at what else you can fit in there, and how fast you can configure and reconfigure the platforms."

After taking a few days' break for the holidays, the soldiers and contractors returned to the PPD in early January. The PPD's next phase examined the vehicles' tactical mobility. It consisted of extensive road marches and advanced drivers' courses, both on- and off-road.

"We wanted to push these vehicles to their limits, driving them around the clock. Sustained, continuous operations are an important part of the mission profile for these units," Bergner said.

Having completed the advanced courses, drivers and other soldiers then moved to the next phase, which involved day and night live fire against reinforced positions. This phase was designed to examine the vehicles' weapon systems.

"We need a vehicle with a gun that can support our operations," Bergner said. "Specifically, we need a gun that can support dismounted infantry operations. Direct-fire support to dismounted infantry assaults and defeating fortified positions are important tasks, as is a 360-degree capability around the vehicle."

Once this phase was completed, the vehicles moved into Fort Knox's urban terrain training site, where the vehicles demonstrated their capabilities in city combat. During this phase, vehicles provided protection and supporting fire for infantrymen clearing streets and buildings.

"Fort Knox has the perfect facilities for us to find out how different platforms perform in close quarters," Bergner said. "Contingency operations in recent years have shown that we need to function in urban terrain. Right now, we are limited in that our heavy forces are not deployable enough and our light forces are too vulnerable in such environments."

Following the urban terrain portion of the PPD, soldiers and program managers examined the vehicles' logistics requirements. They looked at what would be required for the towing and recovery of each vehicle, then evaluated the maintenance requirements of each vehicle, as well as ranges and fuel usage.

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"We want to obtain the best possible vehicle for our soldiers," Bergner said. "We need something that is reliable and sustainable.

The final phase of the PPD involved a gathering and sharing of information. The evaluators compiled and distributed observations about each vehicle.

"As a result of this demonstration, everybody comes out a winner," Bergner said. "We find out what current technology has to offer, and industry learns what our requirements are."

The PPD will be followed by a source-selection board in May or June. The board will culminate in the Army's selection of an interim combat vehicle for the brigade combat team. □

**Infantrymen from the Fort Stewart, Ga.-based 3rd Infantry Division dismount from an IFV during the PPD. Soldiers from separate brigades of the 2nd and 25th Inf. Divs., based at Fort Lewis, Wash., also played key roles in the PPD.**

**The C7 Pandur 6X6 IFV crosses over a two-foot-tall slab of concrete at the Fort Knox MOUT site. The slab was just one of the many obstacles the wheeled vehicles had to surmount during the course of the PPD.**

# Cav Plays a Key Role

**Story by SSG Nancy Morrison**
**Photos by SSG John Valceanu**

FORT Knox's 16th Cavalry Regiment played a key role in ensuring that the PPD process ran smoothly. Soldiers from Fort Knox worked with soldiers from other installations to demonstrate the capabilities of various vehicles, and they took part in virtually every phase of the demonstration. All this was intended to ensure that the best available vehicle is selected to serve as the platform for the new medium brigades.

**SSG Nancy Morrison is assigned to the Fort Knox Public Affairs Office.**

"We are the executors of the PPD for the vehicles we have here; the PPD is not only supported by Fort Knox, but also by soldiers from Fort Lewis and Fort Benning," said COL Mike Jones, 16th Cav. commander. "Our soldiers are the ones using the vehicles that have been brought here to be demonstrated."

Jones said the soldiers are playing an integral part in the PPD and the new brigade.

"We're providing the feedback to the contractors to tell them how they can make their vehicles better, in order to fulfill the needs of the Army," he said.

He added that the experience also allows the Army to glean information about each of these vehicles and get a good idea about what's available on the market.

"These soldiers are putting their hands on each vehicle and checking it out, driving it and firing its weapons in order to give back good soldier comments," said Jones. "These are not engineers. They're cavalrymen, tankers and infantrymen.

"Ultimately it's the soldiers who

*"These soldiers are putting their hands on each vehicle and checking it out, driving it and firing its weapons in order to give back good soldier comments."*

will end up with whichever system is fielded. So, their insights are very important," he said.

According to Jones, master gunners and master drivers were trained on the various vehicles by the manufacturers, then passed the training on to soldiers participating in the PPD.

Jones said that the 16th Cav.'s 1st Squadron prepared a very detailed, well-thought-out training program. It began with a familiarization of the different components of each vehicle. Once soldiers were familiar with a particular vehicle, they learned all the emergency procedures that had to be

**Soldiers prepare a United Defense Armored Gun System for a live fire on the St. Vith range. The tracked vehicle is fitted with Level 1 armor and is armed with a 105mm main gun and a .50-caliber machine gun.**

**Soldiers race to board a waiting LAV-300 Mk II during an exercise intended to demonstrate the wheeled infantry fighting vehicle's ability to provide suppressive fire during dismounted infantry operations.**

followed, including evacuation.

From there they passed through basic driver training on a concrete road, and finally to the advanced driver's course, which featured obstacles and hills.

"Soldiers who shoot live fire went through tank crew gunnery skills training and testing before they took the vehicle to live fire," said Jones. "They then went through the predetermined course's dry-fire, which was without live ammunition. Eventually they went to live fire."

Jones said the crews for each vehicle were made up of soldiers from each of the three installations, and those crewmembers stayed with that vehicle throughout the PPD, providing feedback to the contractor and to the Army for the entire time the vehicle was at Fort Knox.

"Once we got to the end of the demonstration, all these folks went back to their normal jobs," said Jones. "At a future date, the vehicles will be tested by the Army in other forms."

Jones said the 16th Cav. is benefiting from the PPD experience.

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"It's neat to be involved in the front end of such an important thing that's going on in the Army," he said. "We are learning a lot about how to train people on these types of vehicles and how to do good risk management, and all the other things that go into developing a good training program."

He added that the vehicle selected by the Army will end up being used to train future soldiers at Fort Knox.

"There have been no real decisions made on exactly what the training program will look like," Jones said, "but in the 16th Cav. we would generally train armor officers and NCOs on the reconnaissance missions they have to do.

"We train the people who are going to be scout platoon leaders and platoon sergeants and section leaders. We train the lieutenants who will be in charge of the assault gun platoons and the reconnaissance platoons. We train the captains who are going to command the troops, and the reconnaissance and target acquisition squadrons. We will train all the people who are going to lead this outfit."

**Soldiers prepare to board a French-made VAB armored personnel carrier during the demonstration at Fort Knox. The VAB saw combat with French units during the Gulf War, and is currently used by peacekeeping units in the Balkans.**

***(Above)* Contractor personnel and soldiers worked side by side to demonstrate the capabilities of the various vehicles. Here, they prepare an Armored Gun System with Level II armor for a live fire.**

***(Right)* A TPz 1 Fuchs armored personnel carrier — built by Germany's Henschel company — negotiates a narrow alley in Fort Knox's urban terrain training site.**

Jones said he feels it is extremely important for soldiers to be involved in the decision-making process concerning the design of vehicles they will use.

"There are lots of different ways you can design a piece of equipment. Typically, an engineer designs something and it looks great when it's on the drawing board. It may even look good when it rolls off the assembly line," he said. "But only when a soldier operates it will you know how well it works." □

# Safety Prevents Tragedy

**Story by SGT Stacy Wamble**
**Photos by SSG John Valceanu**

SAFETY precautions and rollover drills that soldiers participating in the PPD went through daily helped to prevent serious injuries when a vehicle rolled over during the demonstrations. Three soldiers sustained bumps, bruises and other minor injuries Jan. 10, when the vehicle they were operating rolled over during cross-country operations, said Fort Knox Public Affairs Officer John Rickey.

"While this was an unfortunate incident, we are fortunate that the strict safety guidelines the soldiers received prevented a more serious situation," Rickey said. "Soldiers train in dangerous situations every day, and it is a testament to the units involved — which practice safety daily — that we didn't have more serious injuries. One of the critical factors commanders and soldiers have focused on is safety during the PPD."

The accident occurred during the advanced driving portion of the demonstration. That part of the evaluation assessed the vehicle's mobility on a basic driving course, a cross-country driving course and an advanced driving course.

During the basic driving courses each of the vehicles demonstrated its abilities to master different types of terrain and obstacles, said SSG Kenneth Kispert, a tank commander at the driving course.

Vehicles navigated such obstacles as a trench, rocky terrain, heavy vegetation and a mud course. Each vehicle's ability to maneuver in a European-style village — around sharp turns and across bridges — was also evaluated.

The vehicles also demonstrated their mobility (including swim capability), deployability, lethality, sustainability, survivability and MANPRINT (the ease in which soldiers are able to operate the vehicles). □

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***(Above)*** **A soldier ground-guides a Mobile Tactical Vehicle (Light) on Fort Knox's St. Vith Range. The vehicle is an upgraded variant of the M113 APC.**

***(Right)*** **A General Dynamics Dragoon demonstrates its amphibious capabilities during the PPD. Four of the vehicles evaluated during the PPD showed their ability to function in water.**

***(Below)*** **The Dragoon hurries to another demonstration site.**


**SGT Stacy Wamble is assigned to the Fort Knox Public Affairs Office.**



SPC Christopher Stape